WirelessUSB™

These solutions are designed for short-range, multipoint-to-point connectivity. WirelessUSB enables PC Human Interface Device (HID) peripherals, such as wireless mice, keyboards, media-center remote controls and presenter tools, wire replacement with a low-power and highly reliable, 2.4GHz wireless solution. Cypress' patented WirelessUSB technology offers unparalleled feature set to enable superior RF performance, interference immunity, and maximum battery life.

Function	Range (meters)	Throughput (Kbps)	Package	Temperature Range (°C)	Digi-Key Part No.	Price Each 1	25	100	Cypress Part No.
DSSS Radio SoC	10	62.5	48-VQFN	0 ~ 70	428-1624-ND	6.70	5.50	4.97	CYWUSB6934-48LFXC
DSSS Radio SoC	10	62.5	48-VQFN	0 ~ 70	428-2984-ND ***NEW!***	7.75	6.36	5.74	CYWUSB6934-48LTXC
DSSS Radio SoC	50	62.5	48-VQFN	0 ~ 70	428-1625-ND	11.00	9.02	8.14	CYWUSB6935-48LFXC
DSSS Radio SoC	50	62.5	48-VQFN	-40 ~ 85	428-2985-ND ***NEW!***	11.38	9.33	8.42	CYWUSB6935-48LTXI
PRoC MCU + Radio	50	62.5	48-VQFN	0 ~ 70	428-1771-ND	10.00	8.20	7.40	CYWUSB6953-48LFXC
DSSS/GFSK Radio SoC	10	250kbps/1Mbps	40-VQFN	0 ~ 70	428-2962-ND ***NEW!***	4.76	3.83	3.49	CYRF6936-40LTXC

B

WirelessUSB™ PRoC™ Development Kit

The PRoC (Programmable-Radio-on-a-Chip™) Development Kit (CY3653) includes flexible development boards, PRoC modules, LCD modules, schematics, bills-of-materials, source code, and documentation for designers looking for a seamless transition from wired to wireless solutions. Customers can use the kit to achieve faster time to market for single-chip applications like small form-factor wireless keyboards and mice, presenter tools, wireless thermostats including LCD displays, precision remote controls for RC toys and more. PRoC combines Cypress's WirelessUSB™ 2.4-GHz radio-on-a-chip and PSoC® Programmable System-on-Chip™ mixed signal array in an integrated product. It integrates Cypress's Direct Sequence Spread Spectrum (DSSS) interference immunity technology with the power and flexibility of the PSoC architecture, offering a complete wireless solution in a single chip.

Kit Includes: • PSoC Evaluation Board • PRoC Modules for a fast plug-and-play solution • PRoC Programmer • LCD Module and a CD-ROM with kit documentation • Hardware schematics • Tutorial and firmware for application development

428-1772-ND (CY3653) Development Kit for PRoC..... **$1150.90**

WirelessUSB™ Radio Modules

The CYWM6934/CYWM6935 WirelessUSB Radio Modules offer a complete radio module solution for integration into existing or new 2.4GHz products. These modules are tested for functional operation and are FCC/ETSI(EU)/Industry pre-certified. Modules are supplied with integrated PCB trace antennas. Available in small PCB design which allows the modules to be mounted horizontally to the device PCB, by way of, a 12-pin header.

CYWM6934 Features: • Range of up to 10 meters • Data Throughput up to 65 kbits/sec • Operating Voltage: 2.7 ~ 3.6V • Small PCB Design: .975" (24.38mm) x .65" (16.25mm) x .212" (5.3mm) (L x W x H) • FCC Approved

CYWM6935 Features: • Range of up to 50 meters • Data Throughput up to 65 kbits/sec • Operating Voltage: 2.7 ~ 3.6V • Small PCB Design: .95" (23.75mm) x .95" (23.75mm) x .212" (5.3mm) (L x W x H) • FCC Approved

428-1945-ND (CYWM6934) LS™ Module.....**$13.64**
428-1946-ND (CYWM6935) LR™ Module.....**$14.30**

CyFi™ Starter Kit

CY3271

This intuitive starter kit allows you to evaluate the PSoC programmable system-on-chip and CyFi low-power RF in CapSense™ touch-sensing, proximity-sensing, temperature-sensing and light-sensing applications.

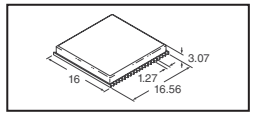
Kit Includes:

- PC dongle with RF
- RF expansion card with power amplification for long-range applications
- Multifunction expansion card
- Two battery packs (2xAAA and CR2032)
- PSoC Designer IDE and Cypress's sense and control dashboard software

428-2272-ND (CY3271)
PSoC FirstTouch™ Kit with CyFi **$144.64**

DeLORME GPS Module and Kit

The GPS2058-10 module is a high sensitivity, low power, SMD type 16-channel GPS receiver designed for a broad spectrum of OEM applications. Based on the fast and deep GPS signal search capabilities of the STMicroelectronics (Teseo), it features an integrated RF block combined with the high performance CPU of ARM7TDMI microprocessor. The end result provides excellent navigation performance in the most challenging urban environments. The GPS2058-10 offers RTCA-SC159/WAAS/EGNOS support and provides excellent sensitivity and high configurability in a small package.



Description	Frequency (MHz)	Hot/Warm/Cold Start (Seconds)	Package	Digi-Key Part No.	Price Each 1	25	100	Digi-Key Part No.	Tape and Reel Pricing
16-Channel L1 GPS Receiver Module	1575.42	2.5 / 34 / 39	40-Pin SMD	GM-205810-000CT-ND§	41.65	32.04	29.91	GM-205810-000TR-ND	13350.00/500
Development Kit / Navigation System with Street Atlas Software, Antenna and Cables				GM-2058EV-101-ND	495.00	—	—	—	—

§ Cut Tape

NEW! ConnectCore™

The network-enabled ConnectCore for i.MX51 family offers a highly integrated and future-proof System-on-Module (SOM) solution based on the new Freescale® i.MX51 application processor, which offers a high-performance ARM® Cortex™-A8 core, powerful multimedia options, and a complete set of on-chip peripherals and interfaces.

Features: • High-end, low-power 32-bit System-on-Modules • Integrated 10/100 Mbit Ethernet networking • Pre-certified 802.11a/b/g/n wireless LAN interface • On-chip hardware encryption engine • Hardware accelerated high-definition multimedia • Power Management IC and Accelerometer integrated • ZigBee®, cellular and satellite connectivity options • Windows Embedded CE 6.0 and Linux support

Description	Digi-Key Part No.	Price Each	Digi International Part No.
ConnectCore WI-MX51 Module	602-2321-ND	335.84	CC-WMX-LB6A-EA
Digi® Embedded Linux® Kit	602-2319-ND	795.00	CC-WMX51-LX-EA
Digi JumpStart Kit® for Windows Embedded CE 6.0	602-2320-ND	795.00	CC-WMX51-CE6-EA

NEW! Digi m10™ Compact Satellite Modem

The Digi m10 satellite module provides worldwide satellite data connectivity for a wide variety of asset-tracking and industrial remote communication applications. Operating on the ORBCOMM low-earth orbit (LEO) satellite network, it is designed to enable cost-efficient Machine-to-Machine (M2M) communication with virtually unlimited global coverage and no blockage. All at a typical low monthly cost comparable to cellular plans for low data volume M2M applications. Built on Digi's own patented mixed signal chip designed and tailored for satellite applications, the Digi m10 modem offers immediate product design integration through its integrated serial interface. With full support for industrial temperature and operational shock/vibration specifications exceeding SAE J1455, it is the ideal choice for reliable and highly cost-efficient satellite connectivity in even the most demanding application. **Features:** • Global LEO satellite coverage (no blockage) • Extremely compact module form factor • Simple serial interface for host communication • Very low transmit and receive power • Industrial operating temperature

Description	Digi-Key Part No.	Price Each	Digi International Part No.
m10 Compact Satellite Modem Module	602-1165-ND	179.00	DG-M10
m10 Satellite Modem Evaluation Kit	602-1166-ND	299.00	DG-M10-KIT

XPress™ Ethernet Bridge

With a range of up to 15 miles (line-of-sight with a high gain antenna) and the ability to transmit through as many as 10 standard walls, the XPress Ethernet Bridge is an easy-to-use wireless Ethernet bridge that uses the added range and capabilities of the 900MHz band to communicate where Wi-Fi and other wireless data products fall short.

XEB09-C Kit Includes: • (2) RF Modems • (2) 9VDC Power adapters • (2) 1/2 Wave antennas with RPTNC connector
XEB09-I Kit Includes: • (2) RF Modems • (2) 9VDC Power adapters • (2) PoE Injectors • (2) 30' CAT5e Outdoor Cables
XEB09-BCSA Kit Includes: • (1) XEB Multipoint RF Modem • (1) Quick start guide/Manual • (1) 6VDC/110VAC power adapter • (1) 2dBi omni-directional antenna Note: Does not include Ethernet cable
XEB09-BCS Kit Includes: • (1) XEB Multipoint RF Modem
XEB09-BISA Kit Includes: • (1) XEB Multipoint RF Modem in NEMA-4 weatherproof enclosure • (1) Quick start guide/Manual • (1) 12VDC/110VAC power adapter • (1) 2dBi omni-directional antenna (high-gain antenna sold separately) • (1) PoE injector Note: Does not include Ethernet cable
XEB09-BIS Kit Includes: • (1) XEB Multipoint RF Modem in NEMA-4 weatherproof enclosure
XEB09-CIPA Kit Includes: • (2) XEB RF Modem • (2) 2.1 dBi Weatherproof Dipole Antenna • (2) 12VDC Power Supply • (2) PoE Injector Note: Does not include Ethernet cable.
XEB09-CISA Kit Includes: • (1) XEB RF Modem • (1) 2.1 dBi Weatherproof Dipole Antenna • (1) 12VDC Power Supply • (1) PoE Injector Note: Does not include Ethernet cable.

Frequency	Power Output	RF Data Rate (Baud)	Connection Type	Use	Digi-Key Part No.	Price Each	Digi International Part No.
900MHz	125mW	1.5Mbps	Ethernet	Commercial	XEB09-C-ND	699.00	XEB09-C
900MHz	125mW	1.5Mbps	Ethernet	Industrial	XEB09-I-ND	999.00	XEB09-I
900MHz	125mW	1.5Mbps	Ethernet	Commercial	602-1089-ND‡	499.00	XEB09-BCSA
900MHz	125mW	1.5Mbps	Ethernet	Commercial	602-1090-ND‡	479.00	XEB09-BCS
900MHz	125mW	1.5Mbps	Ethernet	Industrial	602-1091-ND‡	659.00	XEB09-BISA
900MHz	125mW	1.5Mbps	Ethernet	Industrial	602-1092-ND‡	629.00	XEB09-BIS
900MHz	125mW	1.5Mbps	Ethernet	Industrial	602-1177-ND‡◆ ***NEW!***	935.63	XEB09-CIPA
900MHz	125mW	1.5Mbps	Ethernet	Industrial	602-1178-ND‡◆ ***NEW!***	467.81	XEB09-CISA

‡ Multipoint ◆ ***RoHS Compliant***

Wireless Accessories

Description	Connection Type	Digi-Key Part No.	Price Each	Digi International Part No.
Interface Board for XStream and XCite	RS-232/485	XIB-R-ND◆	50.00	XIB-R
Interface Board for XStream and XCite	USB	XIB-U-ND◆	50.00	XIB-U
1 Watt Interface Board for XTend	RS-232/485	XTIB-R-ND	80.00	XTIB-R
1 Watt Interface Board for XTend	USB	XTIB-U-ND	80.00	XTIB-U
9V Battery Adapter for RS-232 Board	—	JP2P3-C2C-4I-ND◆	5.00	JP2P3-C2C-4I
1' Right Angle Male to N-Male	RPSMA	JR2N1-CL1-1F-ND◆	30.89	JR2N1-CL1-1F
4' Right Angle Male to N-Male	RPSMA	JR2N1-CL1-4F-ND◆	33.56	JR2N1-CL1-4F
6' Right Angle Male to N-Male	RPSMA	JR2N1-CL1-6F-ND◆	35.34	JR2N1-CL1-6F
10' Right Angle Male to N-Male	RPSMA	JR2N1-CL1-10F-ND◆	38.90	JR2N1-CL1-10F
20' Right Angle Male to N-Male	RPSMA	JR2N1-CL1-20F-ND◆	47.80	JR2N1-CL1-20F
RF Cable Assembly Adapter for connecting RPSMA antenna to U.FL connector	RPSMA	JF1R6-CR3-4I-ND◆	4.50	JF1R6-CR3-4I
Cable 10' RPTNC Male to N-Male	—	JT2N1-CL1-10F-ND◆	39.90	JT2N1-CL1-10F

◆ ***RoHS Compliant***

Antennas

Type	Gain (dBi)	Frequency (MHz)	Impedance (Ω)	Connector	Digi-Key Part No.	Price Each	Digi International Part No.
Omni	2.1	902-928	50	N-Type Female	A09-F2NF-M-ND	123.00	A09-F2NF-M
	5.1	902-928	50	N-Type Female	A09-F5NF-M-ND	174.00	A09-F5NF-M
	8.1	902-928	50	N-Type Female	A09-F8NF-M-ND	217.00	A09-F8NF-M
Yagi	8.1	896-980	—	8" Pigtail with N-Type Female	A09-Y8NF-ND	60.00	A09-Y8NF
	11.1	895-940	—		A09-Y11NF-ND	70.00	A09-Y11NF
Omni	2.1	900	50	RPSMA	A09-HASM-675-ND	20.00	A09-HASM-675
	3.0	900	50	RPSMA	A09-HSM-7-ND	20.00	A09-HSM-7
Omni	2.1	2.4GHz	50	RPSMA	A24-HASM-450-ND	5.00	A24-HASM-450
	2.1	2.4GHz	50	RPSMA	A24-HASM-525-ND	20.00	A24-HASM-525

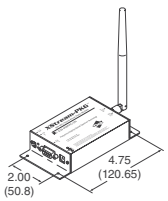
Stand-Alone Radio Modems

Digi International stand-alone radio modems were designed to provide end users with an easy-to-install wireless serial communication link.

Features:
• Plug and communicate (no configuration required) • Transparent operation supports existing software and systems • Retries and acknowledgements for guaranteed packet delivery • RS-232/422/485, Ethernet, USB protocol and multi-drop bus support • Low power modes for current consumption as low as 1mA • Support for multiple data formats (7/8 bits, Even/Odd/No Parity) • Selectable power outputs

Includes:
• Stand-Alone Radio Modem • CD (software and documentation) • 1/2 wave antenna • Serial loopback adapter • NULL modem adapter (male-to-male) • NULL modem adapter (female-to-female) • Male DB-9 to RJ-45 adapter • Female DB-9 to RJ-45 adapter • Power adapter • 9V battery adapter • RS-232 cable (6')

XStream™
PKG RS-232 Shown



Dimension in Inches (mm)

Frequency	Power Output	RF Data Rate (Baud)	Connection Type	Digi-Key Part No.	Price Each	Digi International Part No.
900MHz	1Watt	115K	RS-232	XT09-PKI-RA-ND	299.00	XT09-PKI-RA
900MHz	1Watt	115K	USB	XT09-PKC-UA-ND◆	299.00	XT09-PKC-UA
900MHz	100mW	9600	RS-232	X09-009PKC-RA-ND◆	250.00	X09-009PKC-RA
900MHz	100mW	19.2K	RS-232	X09-019PKC-RA-ND◆	250.00	X09-019PKC-RA
2.4GHz	50mW	9600	RS-232	X24-009PKC-RA-ND◆	199.00	X24-009PKC-RA
2.4GHz	50mW	19.2K	RS-232	X24-019PKC-RA-ND	199.00	X24-019PKC-RA
2.4GHz	50mW	9600	USB	X24-009PKC-UA-ND	199.00	X24-009PKC-UA
900MHz	100mW	9600	Ethernet	X09-009PKC-EA-ND◆	350.00	X09-009PKC-EA
900MHz	100mW	19.2K	Ethernet	X09-019PKC-EA-ND	350.00	X09-019PKC-EA
900MHz	4mW	38.4K	RS-232	XC09-038PKC-RA-ND	106.43	XC09-038PKC-RA

◆ ***RoHS Compliant***

Wireless Development Kits

Development Kit Features: • Plug-and-communicate (default mode- no configuration required) • True peer to peer network (no need to configure a "Master" radio) • Transparent mode supports existing software applications and legacy systems • Addressing capabilities provide for point-to-point and point-to-multipoint networks • Uses standard AT commands and/or fast binary commands for changing parameters • Native RS485/422 (multi-drop-bus) protocol support • Retries and acknowledgements of packets • Provides guaranteed delivery of critical packets in difficult environments • Multiple low power modes including shutdown pin, cyclic sleep and serial port sleep • Signal strength register for link quality monitoring and debugging

XStream™ Development Kits Include: • XStream wireless module with an integrated wire antenna • XStream wireless module with 1/2 Wave dipole antenna • (2) RS-232/422/485 interface boards • CD (X-CTU™ software and documentation) • Serial loopback adapter • NULL modem adapter (male-to-male) • NULL modem adapter (female-to-female) • Male DB-9 to RJ-45 adapter • Female DB-9 to RJ-45 adapter • (2) Power adapters • 9V battery adapter • (2) RS-232 cables (6')

XCite™ Development Kits Include: • XCite wireless module with an integrated wire antenna • XCite wireless module with 1/2 wave dipole antenna • (2) RS-232 PC serial interface boards • (2) DSub-9 serial cables • (2) 9V 400mA power supplies • 9V battery clip adapter • Serial loopback adapter • NULL modem adapter (male-to-male) • NULL modem adapter (female-to-female) • X-CTU test/configuration utility software (EXE file)

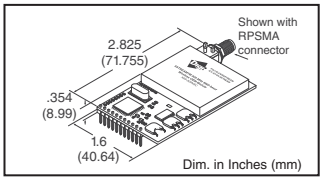
XTend™ Development Kit Include: • (2) XTend OEM RF modules with 1/2 wave dipole antennas • (2) RS-232 PC serial interface boards • (2) DSub-9 serial cables • (2) 9V 400mA power supplies • 9V battery clip adapter • Serial loopback adapter • NULL modem adapter (male-to-male) • NULL modem adapter (female-to-female) • X-CTU test/configuration utility software

Frequency	Power Output	RF Data Rate (Baud)	Digi-Key Part No.	Price Each	Digi International Part No.
XStream Development Kits					
900MHz	100mW	9600	X09-009-DK-ND	409.00	X09-009-DK
900MHz	100mW	19.2K	X09-019-DK-ND	409.00	X09-019-DK
2.4GHz	50mW	9600	X24-009-DK-ND◆	409.00	X24-009-DK
2.4GHz	50mW	19.2K	X24-019-DK-ND◆	409.00	X24-019-DK
XCite Development Kits					
900MHz	5mW	9600	XC09-009-DK-ND◆	152.73	XC09-009-DK
900MHz	5mW	38.4K	XC09-038-DK-ND	152.73	XC09-038-DK
XTend Development Kit					
900MHz	1 Watt	115K	XT09-DK-ND	499.00	XT09-DK

◆ ***RoHS Compliant***

Wireless OEM Modules

XStream™, XCite™ and XTend™ Wireless OEM Modules were designed to provide product designers with a transparent and easy to design-in wireless serial communication link.
Features: • Plug-and-communicate (no configuration required) • Transparent operation supports existing software and systems • 5V CMOS level serial interface (configurable interface baud rate) • XON/XOFF or hardware flow control • Support for multiple data formats (7/8/9 bits, Even/Odd/No Parity) • Low power modes down to 10µA
XStream: Range: Up to 1500 feet indoor/urban • Up to 7 miles line-of-sight with dipole • Up to 20 miles line-of-sight with high gain • Allows up to 7 FHSS (frequency hopping spread spectrum) pairs to operate in close proximity • Board size: 1.6" (40.64mm) x 2.825" (71.755mm) • -110dBm receiver sensitivity
Power: 5VDC supply voltage
XCite: Range: 300 feet indoor/urban • 1000 feet line-of-sight with dipole • Allows up to 7 FHSS (frequency hopping spread spectrum) pairs to operate in close proximity • -108dBm receiver sensitivity • Board size: 1.6" (40.64mm) x 2.825" (71.755mm)
Power: 2.85VDC to 5.50VDC
XTend: Range: Up to 3,000 feet indoor/Urban • Up to 14 miles line-of-sight with dipole • Up to 40 miles line-of-sight with high gain • Allows up to 10 FHSS (frequency hopping spread spectrum pairs to operate in close proximity) • -110dBm receiver sensitivity • Board size 1.456: (36.98mm) x 2.402" (61mm)
Power: 2.8 to 5.5VDC



Dim. in Inches (mm)

Frequency	Power Output	RF Data Rate (Baud)	Connector/ Antenna Type	Digi-Key Part No.	Price Each	Digi International Part No.
XStream Modules						
900MHz	100mW	9600	RPSMA	X09-009NSC-ND◆	150.00	X09-009NSC
900MHz	100mW	19.2K	RPSMA	X09-019NSC-ND◆	150.00	X09-019NSC
900MHz	100mW	9600	3" Wire	X09-009WNC-ND◆	138.00	X09-009WNC
2.4GHz	50mW	9600	RPSMA	X24-009NSC-ND◆	107.66	X24-009NSC
2.4GHz	50mW	19.2K	RPSMA	X24-019NSC-ND	107.66	X24-019NSC
2.4GHz	50mW	9600	3" Wire	X24-009WNC-ND	103.31	X24-009WNC
2.4GHz	50mW	19.2K	3" Wire	X24-019WNC-ND◆	103.31	X24-019WNC
XCite Modules — RoHS Compliant						
900MHz	5mW	9600	3" Wire	XC09-009WNC-ND	40.38	XC09-009WNC
900MHz	5mW	38.4K	3" Wire	XC09-038WNC-ND	40.38	XC09-038WNC
900MHz	5mW	9600	RPSMA	XC09-009NSC-ND	42.50	XC09-009NSC
900MHz	5mW	38.4K	RPSMA	XC09-038NSC-ND	42.50	XC09-038NSC
XTend Modules						
900MHz	1 Watt	115K	RPSMA	XT09-SI-ND	179.00	XT09-SI
900MHz	1 Watt	115K	RPSMA	602-1183-ND◆ ***NEW!***	179.00	XT09-SI-MESH
900MHz	1 Watt	115K	MMCX	XT09-MI-ND	179.00	XT09-MI

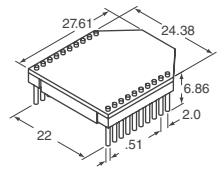
◆ ***RoHS Compliant***

XBee®, XBee-PRO®, ZigBee® and ZigBee-PRO® Wireless Modules

XBee and XBee-PRO Wireless Modules were designed to provide all the benefits of low-power advanced networking in a low-cost solution that dramatically reduces time-to-market. In addition, the small form factor saves valuable board space. The XBee ZNet 2.5 (formally known as Series 2) is based on ZigBee/802.15.4 silicon from Ember™. It features ZigBee firmware for creating ad-hoc mesh networks. **Features:** • Plug and communicate (No configuration required) • Retries and acknowledgements for guaranteed packet delivery • Uses standard AT commands for changing parameters • Low power modes down to 10µA **Development Kits Include:** • (2) XBee-PRO Modules with wire and U.FL • (3) XBee Modules with each antenna option • RPSMA 1/2 wave antenna • Cables • Connectors • XCTU Software • 9V clip and adaptor • (2) XBee ZNet 2.5 OEM RF Modules • (5) Development Boards

Frequency	Power Output	RF Data Rate (Baud)	Connection / Antenna Type	Digi-Key Part No.	Price Each	Digi International Part No.
XBee Modules — RoHS Compliant						
2.4GHz	1mW	250K	Chip Antenna	XB24-ACI-001-ND	19.00	XB24-ACI-001
	1mW	250K	U.FL Connector	XB24-AUI-001-ND	19.00	XB24-AUI-001
	1mW	250K	Whip Antenna	XB24-AWI-001-ND	19.00	XB24-AWI-001
XBee-PRO Modules — RoHS Compliant						
900MHz	50mW	156.25K	Wire Antenna	602-1167-ND ***NEW!***	39.00	XBP09-DPWIT-156
	50mW	156.25K	U.FL Connector	602-1168-ND ***NEW!***	39.00	XBP09-DPUIT-156
	50mW	156.25K	RPSMA	602-1169-ND ***NEW!***	42.00	XBP09-DPSIT-156
2.4GHz	100mW	250K	Chip Antenna	XBP24-ACI-001-ND	32.00	XBP24-ACI-001
	100mW	250K	U.FL Connector	XBP24-AUI-001-ND	32.00	XBP24-AUI-001
	100mW	250K	Whip Antenna	XBP24-AWI-001-ND	32.00	XBP24-AWI-001
XBee ZNet 2.5 Modules — RoHS Compliant						
2.4GHz	2mW	250K	Chip Antenna	XB24-BCIT-004-ND	21.00	XB24-BCIT-004
	2mW	250K	RPSMA	XB24-BSIT-004-ND	23.00	XB24-BSIT-004
	2mW	250K	U.FL Connector	XB24-BUIT-004-ND	21.00	XB24-BUIT-004
	2mW	250K	Wire Antenna	XB24-BWIT-004-ND	21.00	XB24-BWIT-004
XBee-PRO ZNet 2.5 Modules — RoHS Compliant						
2.4GHz	100mW	250K	Chip Antenna	XBP24-BCIT-004-ND	34.00	XBP24-BCIT-004
	100mW	250K	RPSMA	XBP24-BSIT-004-ND	36.00	XBP24-BSIT-004
	100mW	250K	U.FL Connector	XBP24-BUIT-004-ND	34.00	XBP24-BUIT-004
	100mW	250K	Wire Antenna	XBP24-BWIT-004-ND	34.00	XBP24-BWIT-004
XBee and XBee-PRO Interface Boards — RoHS Compliant						
—	—	—	RS-232	XBIB-R-ND	60.00	XBIB-R
	—	—	USB	XBIB-U-ND	60.00	XBIB-U

Dimensions in mm



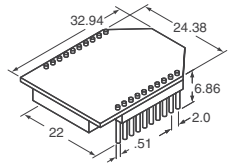
XBee/XBee ZNet 2.5/
XBee-PRO Znet 2.5/ZigBee Module

◆ ***RoHS Compliant***

(Continued)

XBee®, XBee-PRO®, ZigBee® and ZigBee-PRO® Wireless Modules *(Cont.)*

Dimensions in mm



XBee-PRO and ZigBee-PRO Module

Frequency	Power Output	RF Data Rate (Baud)	Connection / Antenna Type	Digi-Key Part No.	Price Each	Digi International Part No.
NEW! ZigBee-PRO Modules — RoHS Compliant NEW!						
2.4GHz	18dBm	250kbps	PCB, Surface Mount	602-1179-ND	28.00	XBP24BZ7PIT-004
	18dBm	250kbps	RP-SMA	602-1180-ND	29.00	XBP24BZ7SIT-004
	18dBm	250kbps	On-Board, Wire Whip	602-1181-ND	28.00	XBP24BZ7WIT-004
ZigBee Modules						
2.4GHz	2mW	250K	Chip Antenna	602-1096-ND◆	20.21	XB24-Z7CIT-004
	2mW	250K	U.FL Connector	602-1097-ND	20.21	XB24-Z7UIT-004
	2mW	250K	Wire Antenna	602-1098-ND	20.21	XB24-Z7WIT-004
	2mW	250K	RPSMA Connector	602-1099-ND◆	26.45	XB24-Z7SIT-004
ZigBee-PRO Modules						
2.4GHz	50mW	250K	Chip Antenna	602-1100-ND	36.65	XBP24-Z7CIT-004
	50mW	250K	U.FL Connector	602-1101-ND	36.65	XBP24-Z7UIT-004
	50mW	250K	Wire Antenna	602-1102-ND	36.65	XBP24-Z7WIT-004
	50mW	250K	RPSMA Connector	602-1103-ND	38.79	XBP24-Z7SIT-004
900MHz	50mW	156K	U.FL Connector	602-1131-ND◆	38.00	XBP09-DMUIT-156
	100mW	9.6K	U.FL Connector	602-1132-ND◆	39.00	XBP09-XCUIT-009
NEW! Finished XBee Units — RoHS Compliant NEW!						
2.4GHz	1dBm	250K	Transceiver	602-1142-ND	69.00	XA-Z16-CS5RL
	1dBm	250K	Transceiver	602-1143-ND	69.00	XA-Z16-CS4RL
	4.5dBm	250K	XSTICK USB	602-1144-ND	49.00	XU-Z11
	1dBm	250K	RS485	602-1147-ND	69.00	XA-Z16-CS3RL
	1dBm	250K	RS232	602-1148-ND	69.00	XA-Z16-CS2RL
	17dBm	250K	Router	602-1149-ND	69.00	XR-Z14-CW1P1
	17dBm	250K	Analog RPSMA	602-1150-ND	79.00	XA-Z14-CS5P-A
	10dBm	250K	Digital RPSMA	602-1151-ND	79.00	XA-Z14-CS4P-W
	17dBm	250K	RS485 RPSMA	602-1152-ND	79.00	XA-Z14-CS3P-A
	17dBm	250K	RS232 RPSMA	602-1153-ND	79.00	XA-Z14-CS2P-A
	17dBm	250K	USB	602-1154-ND	79.00	XA-Z14-CE1P-A
XBee and XBee-PRO 2.5 Development Kits						
Developer's Starter Kit for XBee				XB24-DKS-ND	129.00	XB24-DKS
Developer's Kit for XBee-PRO				XBP24-DKS-ND◆	179.00	XBP24-DKS
Development Kit for XBee-PRO				XB24-PDK-ND◆	339.00	XB24-PDK
XBee-PRO and XBee Development Kits						
Development Kit for XBee-PRO DigiMesh™ 900				602-1130-ND	299.00	XBP09-DMDK
Development Kit for XBee Multipoint RF Modules				602-1133-ND◆	149.00	XBP09-XC009-DK
Development Kit for XBee-PRO ZB Programmable				602-1182-ND◆ ***NEW!***	423.75	XBP24BZ7B-DK

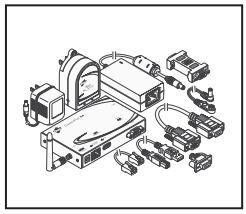
◆ ***RoHS Compliant***

NEW! iDigi™ Development Kit

The iDigi Professional Development Kit ZB includes all the hardware and software tools necessary to deploy and configure a ZigBee network through the iDigi platform. By using the iDigi platform, developers can rapidly deploy and manage their applications remotely across a ZigBee network through an IP connection, without programming middleware applications.

Development Kit includes:

• ConnectPort X4 Ethernet gateway • XBee-PRO ZB RF module w/RPSMA connector • XBee ZB w/RF module Wire Whip antenna • XBee wall router • XBee USB interface board • XBee RS-232 interface board • North American version power supplies • Cables and documentation • Also includes Python programming tools for custom application development



Description	Digi-Key Part No.	Price Each	Digi International Part No.
ZigBee Networking Development Kit for iDigi Platform	602-1140-ND	307.64	XK-Z11-PD

Digi Connect® Wi-SP

The Wi-SP is built on leading NetSilicon® 32-bit NET+ARM technology. This wireless device server delivers a true plug-and-play device networking solution that combines the benefit of secure wireless networking technology with proven serial port connectivity. It is the ideal choice in retail, warehouse, healthcare and medical applications, allowing you to respond immediately to the ever-changing requirements and challenges.

Features:

• 32-bit NET+ARM high-performance RISC processor (NS7520 55MHz) • 4MB Flash and 16MB RAM integrated • Switch-selectable RS-232/422/485 interface (DB-9M): Throughput up to 230,400 bps; 7, 8 data bits; 1, 1.5, 2 stop bits; None/even/odd parity; Full signal support with software/hardware flow control • 802.11b wireless LAN interface; Infrastructure (BSS) and Ad-Hoc Mode (IBSS) • Flexible 9-30VDC power supply

Description	Digi-Key Part No.	Price Each	Digi International Part No.
2.4GHz Wireless Device Server Adapter	602-1032-ND	369.00	DC-WSP-01-S

Digi Connect® Wi-ME

The Digi Connect Wi-ME is a fully customizable and secure 802.11b wireless embedded module and makes fully transparent 802.11b integration possible without the traditional complexities of hardware and software integration work.

Features: • 32-bit NET+ARM high-performance RISC processor (NS7520 @ 55MHz) • Radio pre-certified in North America, EU and Japan • 2 high-speed TTL serial interfaces • On-board memory 4MB Flash and 8MB RAM • WPA/WPA2/802.11i • Transmit power: 16dBm typical • Receive sensitivity: -82dBm @ 11Mbps • Five shared General Purpose Input/Output (GPIO) ports • High-speed TTL serial interface • 3.3VDC @ 400mA max (1.32W)

Description	Digi-Key Part No.	Price Each	Digi International Part No.
8MB SDRAM, 4MB Flash, Std. Firmware	602-1037-ND◆	130.00	DC-WME-01T-S
8MB SDRAM, 4MB Flash, Customizable	602-1038-ND◆	130.00	DC-WME-01T-C
Integration Kit (for use with "S" models)	602-1051-ND◆	299.00	DC-WME-KT
Development Kit without Raven Debugger (for use with "C" models)	602-1001-ND	738.00	DC-WME-01T-GN-NR
Customizable with JTAG Interface	602-1002-ND	249.00	DC-WME-01T-JT

◆ ***RoHS Compliant***

Digi Connect® Wi-EM

The Digi Connect Wi-EM is a fully customizable and secure 802.11b wireless embedded module that provides integration flexibility in a variety of connection options, and makes fully transparent 802.11b integration possible without the traditional complexities of hardware and software integration work.

Features: • 32-bit NET+ARM high-performance RISC processor (NS7520 @ 55MHz) • 2 high-speed TTL serial interfaces • Radio pre-certified in North America, EU and Japan • On-board memory 4MB Flash and 8MB RAM • WPA/WPA2/802.11i • Transmit power: 16dBm typical • Receive sensitivity: -82dBm @ 11Mbps • Five shared General Purpose Input/Output (GPIO) ports • High-speed TTL serial interface • 3.3VDC @ 400mA max (1.32W)

Description	Digi-Key Part No.	Price Each	Digi International Part No.
8MB SDRAM, 4MB Flash, Std. Firmware without antenna	602-1067-ND◆	148.75	DC-WEM-02T-NC
8MB SDRAM, 4MB Flash, Std. Firmware	602-1041-ND◆	140.00	DC-WEM-02T-S
Integration Kit (for use with "S" models)	602-1008-ND◆	299.00	DC-WEM-02T-KT
Development Kit without Raven Debugger (for use with "C" models)	602-1010-ND	738.00	DC-WEM-02T-GN-NR
Customizable Module with JTAG Interface	602-1012-ND◆	249.00	DC-WEM-02T-JT

◆ ***RoHS Compliant***

ConnectCore™ Wi-9C

Highly-integrated, compact DIMM form factor module based on the 155MHz NS9360 ARM9 processor provides core processing functionality with integrated network connectivity. It enables original equipment manufacturers to design in main processor functionality and networking capabilities with a single, high performance solution.

Features: • 32-bit NS9360 high performance RISC processor (155MHz) with MMU • Up to 4 high-speed TTL serial ports • Up to 4 SPI ports • I²C v1.0 bus interface • USB 2.0 Host/Device Interface • LCD Controller • General Purpose Timers/Counters/PWM • 4 programmable external interrupts • Up to 55 shared General Purpose Input/Output (GPIO) ports • Real-time clock • Pin-compatible wired and wireless modules • Standard: IEEE 802.11b/g • Transmit power: 16dBm typical • Receive sensitivity: -73dBm at 54Mbps • Connector: 1/2 x RP-SMA or 2 x U.FL

Description	Digi-Key Part No.	Price Each	Digi International Part No.
JumpStart Kit for Wi-9C with NET+OS	602-1068-ND	518.75	CC-W9C-NET
JumpStart Kit for Wi-9C with Windows CE	602-1077-ND	499.00	CC-W9C-CE6

ConnectCore™ 9P 9215

Digi's ConnectCore 9P 9215 family of modules utilize Digi's NET+ARM processor and secure 802.11a/b/g WLAN technology to offer the industry's only network-enabled core module with true long-term product availability, meeting the extended life requirements of embedded product designs. **Features:** • Compact form factor with interchangeable module design • Digi 32-bit NS9215 processor with power ARM926EJ-S core • Digi CPU and WLAN technology for true long-term availability • Up to 16 MB flash/32 MB RAM • 10/100 Mbit Ethernet interface • 802.11a/b/g wireless LAN • Strong WPA2/802.11i security • Power management modes • Industrial/extended temperature range

Description	Digi-Key Part No.	Price Each	Digi International Part No.
Highly Integrated Network-Enabled Core Module	CC-9P-V502-C-ND	69.00	CC-9P-V502-C
8MB SDRAM, 4MB Flash Module	602-1163-ND ***NEW!***	1725.00	CC-9P-V502-C-B
8MB SDRAM, 4MB Flash Module	602-1162-ND ***NEW!***	79.00	CC-9P-V502-ZA-C
16MB SDRAM, 8MB Flash Module	602-1161-ND ***NEW!***	84.00	CC-9P-V513-LX
32MB SDRAM, 16MB Flash Module	602-1160-ND ***NEW!***	99.00	CC-9P-V524-LX
802.11A/B/G	602-1158-ND ***NEW!***	129.00	CC-W9P-V502-C
802.11A/B/G	602-1157-ND ***NEW!***	3225.00	CC-W9P-V502-C-B
Jumpstart Kit for Wi-9P 802.11	602-1159-ND ***NEW!***	423.75	CC-W9P-9215-NET

Antennas for Digi Wireless Modules

Description	Digi-Key Part No.	Price Each	Digi International Part No.
2.4GHz Dipole Antenna with 2dBi Gain	602-1064-ND◆	10.00	DC-ANT-24DP
2.4GHz Desktop Antenna with 2dBi Gain	602-1065-ND	20.00	DC-ANT-24DT
30cm Extension Cord with RP-SMA Bulkhead Connector	602-1066-ND◆	12.00	DC-ANT-E-24DP

◆ ***RoHS Compliant***

XBee® Sensors

XBee sensors easily integrate into ZigBee networks, featuring long battery life and small size for unobtrusive installation anywhere. **Features:** • ZigBee wireless sensors - temperature, humidity, light • Small form factor can be mounted anywhere • Long-life battery • Easy to install/configure

Description	Digi-Key Part No.	Price Each	Digi International Part No.
XBee Sensor - Battery Powered Temperature, Humidity and Light	602-1129-ND	139.00	XS-B14-CB2RB
XBee Sensor - Battery Powered Temperature, Humidity and Light	602-1174-ND ***NEW!***	138.00	XS-Z16-CB2R
XBee Sensor - Battery Powered Temperature, Humidity and Light	602-1175-ND ***NEW!***	104.00	XS-Z16-CB1R

ConnectPort™ X Gateways

ConnectPort X gateways aggregate wireless Personal Area Network (PAN) traffic - such as ZigBee and 802.15.4 point-to-multipoint - for IP connectivity over a secure cellular, Wi-Fi or Ethernet connection.

Features: • Multiple configuration options for high performance Drop-in Networking • Full network flexibility: ZigBee / 802.15.4 for PAN connections, Cellular for WAN connections, Wi-Fi (802.11b/g) and Ethernet for WAN or LAN connections • Python development environment • Optional GPS or local storage

Description	Digi-Key Part No.	Price Each	Digi International Part No.
NEW! ConnectPort X8 NEW!			
XBee to Ethernet	602-1171-ND	499.00	X8-A11-E-A
ConnectPort X4 - 802.15.4			
XBee to Ethernet	602-1108-ND	399.00	X4-A11-E-A
XBee to Wi-Fi 802.11g	602-1109-ND	449.00	X4-A11-W-A
XBee to Ethernet and Cellular (2G GPRS)	602-1110-ND	499.00	X4-A11-A01-A
ZigBee to Wi-Fi	602-1155-ND ***NEW!***	449.00	X4-Z11-W-A
ZigBee to Ethernet	602-1156-ND ***NEW!***	399.00	X4-Z11-E-A
ZigBee to Ethernet and Cellular	602-1172-ND ***NEW!***	499.00	X4-Z11-A01-A
ConnectPort X4 - ZNet 2.5			
XBee to Ethernet	602-1111-ND	399.00	X4-B11-E-A
XBee to Wi-Fi 802.11g	602-1112-ND	449.00	X4-B11-W-A
XBee to Ethernet and Cellular (2G GPRS)	602-1113-ND	499.00	X4-B11-A01-A
ConnectPort X2 - ZNet 2.5			
XBee to Ethernet	602-1114-ND	199.00	X2-B11-E-A
XBee to Wi-Fi 802.11b	602-1115-ND	249.00	X2-B11-W-A
ZigBee to Ethernet	602-1173-ND ***NEW!***	199.00	X2-Z11-E-A
XBee ZNet 2.5 Adapters			
XBee RS-485	602-1116-ND	69.00	XA-B14-CS3R
XBee RS-232	602-1117-ND	69.00	XA-B14-CS2R
XBee Sensor	602-1118-ND	69.00	XA-B14-CS1R
XBee USB	602-1119-ND	69.00	XA-B14-CE1R
XBee Digital I/O	602-1120-ND	69.00	XA-B14-CS4R
XBee Analog I/O	602-1121-ND	69.00	XA-B14-CS5R
XBee RS-232PH (Power Harvesting)	602-1122-ND	69.00	XA-B14-CE2R

Watchport® Sensors for Drop-in Networking

Watchport sensors provide a plug-and-play solution for Drop-in Networking applications. Each sensor connects to Digi's XBee sensor adapters (sold separately) for wireless connectivity to sensor data over a low power Zigbee network. Sensors are available to measure distance, proximity, temperature/humidity, acceleration/tilt, and the presence of water. Monitoring remote assets with Watchport sensors can preempt damage to facilities, reduce costly maintenance and warn of threatening environmental conditions. **Features:** • Ideal for remote monitoring of critical environmental data • Plug into Digi's XBee sensor adapter (via RJ-45 connector) for wireless Zigbee connectivity • No external power supply required • A'la carte product selection allows total customization • Easy to install and configure • Extend distance between sensor and XBee sensor adapter with CAT5 UTP cable

Description	Digi-Key Part No.	Price Each	Digi International Part No.
Watchport/H - Humidity/Temperature Sensor	602-1123-ND	90.00	70002335
Watchport/T - Temperature Sensor	602-1124-ND	35.00	70002334
Watchport/D - Distance/Proximity Sensor	602-1125-ND	72.00	70002333
Watchport/W - Water Detector Sensor	602-1126-ND	35.00	70002336
Watchport/A - Accelerometer Sensor	602-1127-ND	72.00	70002337

Drop-in Networking Starter Kits

Digi's Drop-in Networking solutions are designed to provide end-to-end wireless connectivity to distributed electronic devices so those devices and the information they hold can be accessed and managed from anywhere. Drop-in Networking enables product and service differentiation by making devices smarter through wireless network connectivity and using this added intelligence to deliver faster, more accurate and more relevant information to end users.

Kit Includes: • ConnectPort X8 gateway • XBee RS-232 adapter • XBee sensor adapter • XBee modules • Interface boards • Watchport/T temperature sensor • Power supplies, cable adapters, user documentation, and Python code samples

Description	Digi-Key Part No.	Price Each	Digi International Part No.
Drop-in Networking Starter Kit, International	602-1105-ND	549.00	XK-A11-SK-W
Drop-in Networking Starter Kit 802.15.4	602-1145-ND ***NEW!***	499.00	XK-A11-SK

Drop-in Networking Professional Development Kits

The Drop-in Networking Professional Development Kit provides the hardware and software tools to rapidly deploy a real-world wireless sensor / device network and proof-of-concept system. All hardware components are pre-configured to run either mesh or multipoint networking software, which is optimized for low-power, battery-fueled operation.

Kit Includes: • 3 XBee modules (1 XBee and 2 XBee-Pro®) and 3 interface boards (1 USB and 2 RS-232) • 1 ConnectPort™ X2 gateway • 1 XBee wall router or 1 XBee USB adapter • Power supplies, user documentation and configuration CD. The CD also provides a set of Python® programming tools

Description	Digi-Key Part No.	Price Each	Digi International Part No.
Drop-in Networking Development Kit, International	602-1107-ND	419.00	XK-A11-EBP-W
Drop-in Networking Development Kit 802.15.4	602-1146-ND ***NEW!***	399.00	XK-A11-EBP

RF Amplifiers

A Product Line of Diodes Incorporated | ZETEX

The ZNBG range of fixed bias controllers provides all the bias requirements for GaAs and HEMT FETs typically used in satellite receiver LNBs and other general GaAs FETs applications. The IC provides a drain voltage of +2.2V and a gate voltage of -3V which is generated from an internal generator. The range supports up to 6 independent GaAs FETs and all stages are fully protected and temperature compensated.

Description	Package	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape and Reel Qty.	Pricing
LNA, 18dB Gain, Low Current Amplifier	SC70-6	ZAMP001H6CT-ND	.98	.89	.70	—	—	—
Medium Power, 22dB Gain, Wide Dynamic Range Amplifier	SC70-6	ZAMP002H6CT-ND	.98	.89	.70	—	—	—
LNA, 15dB Gain, Very Low Current Amplifier	SC70-6	ZAMP003H6CT-ND	.98	.89	.70	—	—	—
FET Bias Controller, 4 Stage	16-QSOP	ZNBG4000Q16CT-ND	5.22	4.70	3.83	ZNBG4000Q16TR-ND	2,500	2314.00/M
FET Bias Controller, 6 Stage	20-QSOP	ZNBG6000Q20CT-ND	6.92	6.27	5.22	—	—	—

802.11b/g Modules and Kits

AirborneDirect™ Bridge Modules: Come with either Ethernet, Serial (RS232/422/485) or RS232 connections, to a wireless LAN interface utilizing an 802.11b radio. Used to easily integrate wireless into a design. Includes antenna. **Airborne™ Embedded Modules:** Versions include LAN mode module, module with Integrated Ethernet Bridge software or a module with Integrated Serial Bridge software. U.FL Connector on board.

Description	Connection Type	Digi-Key Part No.	Price Each 1	10	25	DPAC/Quatech Part No.
AirborneDirect™ Modules / Kits						
Wireless Device Server 802.11b/g with Antenna	RS232/422/485	590-1018-ND	206.60	—	—	ABDG-SE-DP101-G
Wireless Ethernet Bridge 802.11b/g	Ethernet	590-1021-ND	195.76	—	—	ABDG-ET-DP101-G
Airborne™ Embedded Modules / Kits						
802.11b/g Module Integrated Serial Bridge Software with U.FL Antenna Port	RS232	590-1015-ND	89.00	83.66	80.19	WLNG-AN-DP101-G
802.11b/g Module Integrated Ethernet Bridge Software with U.FL Antenna Port	Ethernet	590-1017-ND	89.00	83.66	80.19	WLNG-ET-DP101-G
802.11b/g WPA2 Enterprise Module Integrated Serial Bridge Software with U.FL Antenna Port	RS232/422/485	590-1044-ND	109.00	102.46	95.93	WLNG-AN-DP501
802.11b/g WPA2 Enterprise Module Integrated Ethernet Bridge Software with U.FL Antenna Port	Ethernet	590-1046-ND	109.00	102.46	95.93	WLNG-ET-DP501
802.11b/g WPA2 Enterprise Module Integrated Serial Bridge Software with U.FL Antenna Port	RS232/422/485	590-1047-ND	109.00	102.46	95.93	WLNG-SE-DP501
Development Kit for Airborne Embedded 802.11b/g Module with Wireless Access Point	Ethernet	590-1037-ND	166.40	—	—	ABDG-ET-DP103
Development Kit for Airborne Embedded 802.11b/g Module with Wireless Access Point	Ethernet	590-1036-ND	279.00	—	—	ABEG-ET-DP103-G
Development Kit for Airborne Embedded 802.11b/g Module without Wireless Access Point	Serial	590-1022-ND	295.00	—	—	WLNG-EK-DP003-G
Development Kit for Airborne Embedded 802.11b/g WPA2 Enterprise Module	Ethernet	590-1043-ND	195.00	—	—	ABEG-ET-DP104
Development Kit for Airborne Embedded 802.11b/g WPA2 Enterprise Module	—	590-1045-ND	295.00	—	—	WLNG-EK-DP501
802.11b/g Enterprise Class Device Server Module Kit SPI to 802.11b/g	Serial	590-1048-ND ***NEW!***	295.00	—	—	WLNG-EK-DP502
Airborne Enterprise Class Ethernet Bridge Module 802.11b/g	Ethernet	590-1049-ND ***NEW!***	295.00	—	—	WLNG-EK-DP503
Airborne Enterprise Class Device Server, SPI to 802.11b/g	RS-232/422/485	590-1050-ND ***NEW!***	109.00	102.46	95.93	WLNG-SP-DP501
Antennas and Accessories						
Adapter Cable, RPSMA (Jack) to U.FL (Plug) 100mm	—	590-1014-ND	13.00	12.22	11.44	ACH0-CA-DP004-G
Antenna, 2dBi, Rubber Duck, RP-SMA	—	590-1028-ND	9.50	8.93	8.36	ACH2-AT-DP002-G
Antenna, 5dBi, Rubber Duck, RP-SMA	—	590-1007-ND	14.00	13.16	12.32	ACH2-AT-DP003
Antenna, 5dBi, Rubber Duck, U.FL (Flying Lead)	—	590-1030-ND	11.90	11.19	10.48	ACH2-AT-DP004-G

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.